usually silent woods. They are not void of bird life, but the resident birds, if not excited, are not loud, and the winter guests from northern lands are naturally very quiet among strangers in the fremd.

Soft peos of the Tufted Tit are heard sometimes, but the species does not seem to be so loud as farther north. Its cousin and companion, the Carolina Chickadee, is also heard from time to time, but the Woodpeckers, the Downy, the Hairy, and the Red-bellied, do not say much, while the Sapsucker says still less. With the exception of the Flicker, the Sapsucker is the most numerous of its tribe, and you are just as likely to find him with the Kinglets and Yellow-rumps in the magnolia of your garden, or with the Robins and Cedar-birds in the hollies at the bayou, as in the deep pine woods. Rather surprising at first is the presence of a bevy of Bobwhites and a troop of Meadowlarks in the pine woods, but they appear to feel themselves as much at home there as the Flicker in the marsh or meadow.

The bird fauna generally is quite varied in Louisiana at the first of March, though migration from the south has not yet set in. Of the species which regularly leave the State in winter only the Martin has returned, but migration begins soon after and becomes brisk by the middle of the month.

A STUDY OF THE GENUS MACRORHAMPHUS.

BY REGINALD HEBER HOWE, JR.

EVER since Thomas Bell and George N. Lawrence in 1852, in the 'Annals' of the New York Lyceum of Natural History (Vol. V, pp. 1-5), recognized that long- and short-billed forms of this genus existed, ornithologists have either been loath (Coues, Birds of the Northwest, p. 477) to accept the two forms, or have been puzzled to identify many specimens in the collections.

A month or two ago while examining some fifteen specimens of this genus in search of a male Long-billed Dowitcher, the fact of

the tremendous sexual variation in size of the Dowitchers was brought to my notice. So very marked was this sexual variation in specimen after specimen examined, and so weak did any color difference appear, that I was at first strongly led to believe that the species griseus represented the males and scolopaceus the females of one and the same species. Only after the examination of many breeding specimens, over thirty in number, did I become convinced that a subspecific difference exists. I believe, with Dr. Ridgway (Bull. N. O. C., Vol. V, pp. 157-160) that scolopaceus should stand as a subspecies and out of which rank I cannot see why it was taken, as intergrades unquestionably exist. I have examined over two hundred and fifty specimens of the genus Macrorhamphus with the result that I find that adults of the two species, in summer or winter plumages, are to be determined almost invariably by the criterion of bill measurement alone, and if in breeding plumage to be even more easily separated. I have been also able from the large series before me to more definitely fix both the breeding ranges and the migratory route of the two forms.

In regard to the sexual variation shown in the order Limicolæ, it is interesting to note that in the Pectoral Sandpiper (*Tringa maculata*) (see Auk, Vol. XVI, p. 179, and Vol. XVIII, p. 107), the *males* exceed the females in size, while in the present genus the *reverse* is true. The Wilson's Snipe (*Gallinago delicata*), American Woodcock (*Philòhela minor*), the genera *Limosa* and *Numenius*, all show this latter type of sexual variation to a greater or less degree.

Macrorhamphus griseus Gmelin.

Geographical Breeding Range.— The breeding range of this species is given as "within the Arctic Circle" in Chapman's 'Hand-book' (p. 155), based on what data, other than hypothetical, I am ignorant. We know, however, from various sources that it breeds in Ungava. Its breeding range I think can be safely said to be to the north and northeast of Hudson Bay, from the 55th parallel northward to Greenland, probably also a little

¹Turner, Birds of Labrador, 1885, p. 246; Stearns, Bird Life in Labrador, 1886, p. 53.

² Arctic Manual and Instructions, 1875.

to the northwest of it, perhaps to the rooth meridian of longitude.¹ Reek's mention² of it as breeding in Newfoundland is too vaguely stated for recognition.

Migratory Routes.—The migratory route of this species, as will be seen by the accompanying map, is down the Atlantic coast, becoming less marked as it progresses southward, until at the Carolina's it seems to pass in the main off the coast, perhaps to the West Indies and Bermuda where it has been recorded.8

The specimens obtained in the Western States are no doubt stragglers, offshoots from the main migration; those from Lower California and Mexico, wintering birds.

Characteristics of summer plumage: Adults.— Upper parts black, the feathers lightly edged with white or buffy, hardly altering the almost black appearance of the back and crown. Uppermost tail-coverts white, spotted with black; tail feathers white barred with black and white, the median ones rarely with pale buff. Breast yellowish rufous, spotted well down on the abdomen.

Characteristics of plumage in transition stages.—M. griseus can be generally distinguished by the black and white barred tail feathers, and yellowish shade of rufous underparts, as long as any of this color is perceptible. Also by the spotted, not barred, uppermost tail-coverts.

Characteristics of plumage in winter. — M. griseus can generally be told by the close spotting of the uppermost tail-coverts.

Characteristic plumage of young.—Upper parts fuscous bordered and barred with buff, breast paler, very faintly marked.

Measurements.4

Adults males	Bill	(culmen)	2.01-2.32	(ave 2.21+)
" females ⁵	44	"	2.35-2.56	(ave. 2.44+)
Young males	44	"	2.04-2.31	
" females	44	"	2.40	

¹ Wright, teste Macoun, Birds of Canada, Part I, pp. 153, 154.

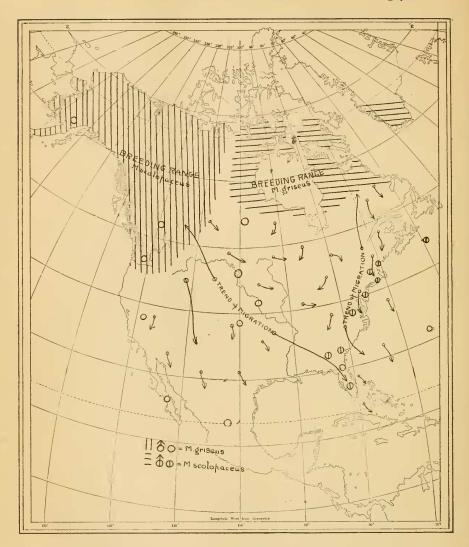
² Canadian Nat., Vol. V, new series, 1870, p. 294.

³ Cory, Cat. of West Indian Birds, p. 92; Reid, Birds of Bermuda, Bull. U.

S. Nat. Mus., No. 25, 1884, pp. 233, 234.

⁴ Taken from breeding specimens or birds having attained or still in the breeding plumage, either in proximity of their breeding grounds or from the centre of their migration routes, and which were absolutely identifiable from their coloration.

⁵ In one extreme specimen, perhaps wrongly sexed, 2.21.



Map showing Breeding Ranges and Migration Routes of Macrorhamphus griseus and M. griseus scolopaceus.

Macrorhamphus griseus scolopaceus (Say).

Geographical Breeding Range.—This form seems almost confined to Alaska in the breeding season, certainly extending no farther east than the 110th meridian of longitude or south of the 48th parallel of latitude in British Columbia.

Migratory Routes. — The trend of the migration route of scolopaceus, as shown on the accompanying map, seems to be in a north-westerly-southeasterly direction in the main to the east of the Rocky Mountains. Offshoots from the main route reach the Pacific and Atlantic coasts, on the latter not uncommonly from Sable Island southward. Perhaps a few work up the coast from Florida where they are by far the most common of the two forms on migrations, especially in November and February.

Characteristics of summer plumage: Adults.—Upper parts black, the feathers strongly edged and marked with deep rufous; this is especially so in young birds, giving the back and crown a mottled black and rufous effect. Uppermost tail-coverts white generally barred with black, outer tail feathers white barred with black, median ones barred with black and rufous. Breast salmon; throat spotted with round arrowshaped markings; breast and flanks barred with black.

Characteristics of plumage in transition stages: — Scolopaceus can be distinguished well into the autumn and in the early spring by the barred rufous and black median tail feathers, and salmon tinge of the breast coloring.

Characteristics of plumage in winter. — M. g. scolopaceus can generally be told by the barred uppermost tail-coverts.

Characteristics of plumage of young.—Upperparts black, heavily bordered and marked with deep rufous; tips of the median tail feathers barred with black and rufous; throat whitish, faintly marked; breast light salmon lightly marked with arrow-shaped spots of dusky, abdomen pale salmon.

Measurements.

Adult males ¹	Bill	(culmen)	2.23 -2.71	(ave. 2.45+)
" females1	6.6	66	2.40 -3.04	(ave. 2.71+)
Young males	66	44	$1.90^{2}-2.59$	
" females	66	66	— 2.67	

¹ Extreme specimens of males measure 2.11 and 2.80 (the latter perhaps erroneously sexed); of an extreme female 3.08.

² Still showing down.

For the use of specimens or generous assistance my thanks are due to Messrs. William Brewster, Walter Deane, H. B. Bigelow, Outram Bangs, Witmer Stone, Drs. J. A. Allen, Robert Ridgway, Jonathan Dwight, Jr., Walter Faxon, Louis B. Bishop, Mr. A. H. Norton, and others.

BIRDS OF PREY AS OCEAN WAIFS.

BY H. W. HENSHAW.

It is no unusual event, as every ornithologist knows, for land birds to board ships, when a greater or less distance off land, or to be seen from their decks as they wing an aimless course over the ocean. It is fair to infer that such known cases are very few, compared to the number of birds that are forced off land by unfriendly gales and that finally perish miserably in the depths of ocean unseen of human eye. After once losing sight of land, few of the comparatively weak-winged land birds are likely ever to regain it, and no doubt many of the powerful-winged species become hopelessly lost when once the friendly land has faded from view. The ocean is no friend to the land bird, but annually exacts its deadly toll with unfailing certainty.

Two unusually interesting instances of birds taking refuge on board ships have recently come to my notice, and, as they possess special interest to American ornithologists, I here record them. Both cases have been communicated by Capt. Peter Johnson of the bark 'Roderick Dhu' which sails between San Francisco and Hilo.

In May or June of 1897 a brown hawk boarded the 'Dhu' when some 200 miles outward bound from Hilo and, as one sure of its rights, took through passage to California. The bird chose the end of the starboard royal for its perch, and maintained its place all the way over, save when it made excursions from the ship after "small birds." Just what the latter were is not certain, though the Captain surmised, with much probability, that they